

REMARKS

Reconsideration and allowance of this application is respectfully requested in light of the above amendments and the following remarks.

The Applicants acknowledge with appreciation the indication in the Office Action that claims 1-8, 12, 23 and 33 are allowed, and that claim 14 would be allowable if rewritten in independent form to include all of the limitations of the base claim and any intervening claims.

Claims 2, 13, 23 and 32 have been amended to overcome the 35 U.S.C. §112, second paragraph, rejections applied to claim 13, to ensure proper antecedent support for each recited feature, and to correct minor grammatical mistakes, claims 25-27 have been cancelled without prejudice or disclaimer, and claims 34-35 have been newly added. Support for the subject matter of claims 34-35 is found, for example, in paragraphs [0067]-[0068] of the published U.S. application. (It should be noted that references herein to the specification and drawings are for illustrative purposes only and are not intended to limit the scope of the invention to the referenced embodiments). No new matter is added.

More particularly, the subject matter of new claim 34 corresponds to the feature of "...the control node negotiates with the single or plurality of WAPs using the negotiation unit and provides complementary functionality for the single or plurality of each of the WAPs to form a complete functionality defined for the wireless local area network," as recited by claim 1, and the subject matter of claim 35 corresponds to the feature of "...a negotiating function which dynamically negotiates with the WAP for a secure connection and function split arrangement," as recited by claim 33. No new matter is added.

In the current Office Action, claims 13 and 32 were rejected under 35 U.S.C. §102(e) as being anticipated by Chuah et al. (US 2005/0059396) (hereinafter, “Chuah”). The Applicants respectfully disagree with these rejections and traverse based on the points set forth below.

Claim 13 is directed towards a method for providing service in a wireless local area network (WLAN) and recites the features of:

“13. A method for providing service in a wireless local area network (WLAN) that allows a defined WLAN function split between a wireless access point (WAP) and a single or plurality of Control Nodes (CN) comprising the steps in which:

the WAP discovers CNs that may provide complementary WLAN functions by sending a single or plurality of discover messages containing information about a subset of WLAN functions of the WAP to all of the CNs in the plurality of CNs;

after receiving said discover message, at least one of the CNs replies with a single or plurality of messages containing information about a subset of WLAN functions said at least one CN has available for the WAP; and

said WAP chooses from all of the CNs which replied a proper CN based on local policy and establishes an association with said chosen CN.” (emphasis added)

As explained in the specification, the method of claim 13 provides a method for negotiations between controlling nodes (CNs) and wireless access points (WAPs) of a WLAN based on policies that allow for accommodating static and dynamic differences among the WLAN entities including dynamic changes in WLAN topologies within a single WLAN. (see, e.g., par. [0020] of the published U.S. application).

Chuah fails to disclose, either expressly or inherently, each of the features of claim 1.

By way of review, Chuah is directed towards a communications protocol (data structure) and associated methods for systematically configuring new gateways and/or access points installed in a wireless network environment, thereby reducing the time and cost associated with setting up or modifying a wireless network, such as a wireless fidelity local area network. (par.

[0019]). To achieve these objectives, Chuah discloses and illustrates a method of registering an access point with a gateway at paragraphs [0044]-[0048] and FIGs. 6A and 6B. Specifically, Chuah discloses that an access point is powered up (FIG. 6A, 602) and broadcasts a “gateway query message” over the network (FIG. 6A, 604). A gateway then receives the gateway query message (FIG. 6A, 606), and checks its database of registered access points to determine whether the broadcasting access point is registered therewith (FIG. 6A, 608). If the broadcasting access point is not registered with the gateway, the gateway sends a “unicast service discovery message” (SDM) to the broadcasting access point (FIG. 6A, 612). If the broadcasting access point receives plural SDMs, the broadcasting access point selects an appropriate gateway for registration (FIG. 6A, 616, 618). The broadcasting access point initiates an AP registration request message to the selected gateway (FIG. 6A, 620), and provides an “AP location, IP address, MAC address, number of radios, radio types, radio frequency range, and lifetime information” in the registration request message (shown in FIG. 7) to the selected gateway (FIG. 6A, 622).

As explained above, Chuah discloses that an access point discovers gateways at which the access point is not registered by broadcasting a gateway query message, and registers its basic information, such as its address and radio characteristics, at a selected gateway, among the discovered gateways.

In contrast, claim 13 recites the feature of: “...the WAP discovers CNs that may provide complementary WLAN functions by sending a single or plurality of discover messages containing information about a subset of WLAN functions of the WAP to all of the CNs in the plurality of CNs...” and “...after receiving said discover message, at least one of the CNs replies with a single or plurality of messages containing information about a subset of WLAN functions

said at least one CN has available for the WAP.” Chuah does not disclose, either expressly or inherently, either of these features of claim 13.

More specifically, Chuah does not mention anything about the access point 138 discovering a control node that “may provide complementary WLAN functions,” as recited by claim 1. The Office Action (pg. 4) alleges that the “access point 138” disclosed by Chuah corresponds to the “WAP” recited by claim 1, and further alleges that the “gateway query message” disclosed by Chuah corresponds to the “discover message” recited by claim 13. However, although Chuah discloses that the access point transmits the “gateway query message” to a gateway, Chuah does not disclose that the gateway query message is used to discover “a control node that “may provide complementary WLAN functions,” as recited by claim 13. Chuah does not mention anything about complementary WLAN functions at all.

Furthermore, Chuah does not does not disclose that the “gateway query message” contains “information about a subset of WLAN functions” of the access point, as recited by claim 13. Chuah does not mention a “subset” of functions of the access point 138 anywhere, and therefore clearly fails to disclose that the “gateway query message” contains “information about a subset of WLAN functions” of the access point, as recited by claim 13.

Moreover, Chuah fails to disclose the feature of: “...after receiving said discover message, at least one of the CNs replies with a single or plurality of messages containing information about a subset of WLAN functions said at least one CN has available for the WAP,” as recited by claim 1. The Office Action (pg. 4) alleges that the “service discovery message” disclosed by Chuah corresponds to this feature of claim 1. However, as explained above, the “service discovery message” does not contain “information about a subset of WLAN functions said at least one CN has available for the WAP,” as recited by claim 13. Instead, Chuah

discloses that the “service discovery message” is used to register a broadcasting AP. (see Chuah, par. [0046] and FIG. 6A, steps 614-620).

Thus, Chuah clearly differs in substantial ways from the method of claim 13 in both (1) the purpose of exchanging messages, and (2) the information contained in the messages. More specifically, the method recited by claim 13 is related to a “defined WLAN function split between a wireless access point (WAP) and a single or plurality of Control Nodes (CN),” (see, e.g., par. [0021], noting that the method of claim 13 accomodates variations in system design, processing load or network topology), whereas the technique of Chuah is related to a protocol which systematically configures new gateways and/or access points to reduce the time and cost associated with setting up or modifying a wireless network. Chuah fails to disclose the features of: “...the WAP discovers CNs that may provide complementary WLAN functions by sending a single or plurality of discover messages containing information about a subset of WLAN functions of the WAP to all of the CNs in the plurality of CNs...” and “...after receiving said discover message, at least one of the CNs replies with a single or plurality of messages containing information about a subset of WLAN functions said at least one CN has available for the WAP,” as recited by claim 13.

Accordingly, the Applicants respectfully submit that Chuah fails to disclose each of the features of claim 13, and that allowance of claim 13 and all dependent claims therefrom is warranted for at least these reasons. Claim 32 recites substantially the same features distinguishing method claim 13 from the applied references, though does so with respect to a wireless access point (WAP). Accordingly, it is respectfully submitted that allowance of claims 13 and 32 and all claims dependent therefrom is warranted for at least these reasons.

In view of the above, it is submitted that this application is in condition for allowance and a notice to that effect is respectfully solicited.

If any issues remain which may best be resolved through a telephone communication, the Examiner is requested to telephone the undersigned at the local Washington, D.C. telephone number listed below.

Respectfully submitted,

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